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AUTHOR Watts, Walter J.
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ABSTRACT

The paper reviews L. Kohlberg's theory of moral reasoning and its relationship to cognitive development of children. R. Feuerstein's theories of mediated learning experience (MLE) are reviewed, and remediation for individuals deficient in cognitive functions is addressed. The paper notes the existence of deficient cognitive functions, specifically nine deficiences: (1) inferential, hypothetical thinking; (2) use of logical evidence; (3) experiencing and subsequently defining the problem; (4) conservation of constancies across variations; (5) capacity for considering two sources of information at once; (6) use of summative behavior; (7) projection of relationships between objects and/or events; (8) use of spontaneous comparative behavior; and (9) use of relevant as opposed to irrelevant cues in problem definition. Analysis is presented of rank ordering of the cognitive functions at various levels of moral reasoning according to preceived level of comprehensiveness manifested in mental processing. Interim results of a pilot study of the effects of Instrumental Enrichment teaching to a class of upper elementary special education and learning disabled students are cited. (CL)

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# A COGNITIVE DEVELOPMENTAL APPROACH TO SOCIAL PROBLEM MANAGEMENT

by

Walter J. Watts, Ph.D.

University of New Brunswick

Fredericton, N.B.

Canada

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## Overview

Fully functioning moral reasoning as described by Kohlberg in Stage VI is not an accomplishment that any adolescent or adult inevitably arrives at. He speculates that the level of moral reasoning attained at any given age or stage in the development of the individual is directly related to the degree of cognitive processing postulated in Piagetian stage theory. The position taken by Piaget and his followers is the belief in the invariance of the stages and their inaccessibility through direct teaching for the purpose of enhancing the reasoning capacity of the person. This paper on the other hand conceives of the existence of certain deficient cognitive functions due to the absence of mediated learning experiences. It is proposed here that the deficient cognitive functions in the moral reasoning process can be identified and remedied thus providing a possibility for more sophisticated levels of processing and indirectly to higher levels of moral reasoning as well.

## Need for Teaching Moral Reasoning

Issues of values and the active teaching of moral education have caused considerable debate lately. More often than not when the question of inclusion in school curricula has been raised recently, it has been answered in the

affirmative. Despite this development, it is a widely held assumption that questions of right or wrong are indirectly and in sufficient measure conveyed by the various agencies in society. While not questioning this position it can be argued that most of the teaching is done in indoctrinational fashion by describing certain intentions or acts as right and others as evil. Although this may be an acceptable practice that has relevance to a few and simple situations, providing the child with a bag of virtues, the bulk of the moral decisions that an individual has to make require an individual analysis of the problem components and a personally reasoned solution. The simple teaching of content (Arbuthnot & Faust, 1981) or the facts of the culture or civilization is demonstrative of a mechanistic model of education, treating the student as a repository of information to be called up for use when the situation arises. The implicit assumption here is that the content taught in the form of Histo , Language and Literature, and a smattering of Social Issues will sufficiently equip the learner to have the cognitive structure at his disposal to deal with the content or life situation at the level required. In essence, the student is taught the content of the rules and not the process, i.e., the structure by which they were arrived at and the principles of justice and equity which they reflect. Relying on the bag of virtues soon proves that situations are too complex, that virtues are often arbitrary in nature and that they are not demonstrably better than any other set of values, but have

simply been accepted by a certain culture as desirable. This approach to moral reasoning produces a morality by convention, by shoulds and ought-nots which are inadequate in dealing with life's multitude of problems. To support this contention Arbuthnot and Faust (1981) as well as Kohlberg (1969) in an earlier study stated that about two-thirds of all American adults do not reach beyond the Stages 3 or 4 of Kohlberg's six stage system. Their level of moral development can be described as conventional with emphasis on concern for social opinion and societal approval. Of the remainder, close to 15 percent do not even reach the preconventional stages in which moral decisions are based on rules backed by power and punishment.

Kohlberg's Theory of Moral Reasoning

Kohlberg conceives of three basic levels of reasoning about moral issues with two stages within each level. The preconventional level is formulated around the belief that moral judgments have to either reflect obedience to power (Stage I) or utilitarianism in the form of a fair exchange for both concerned (Stage II). The individual at Stage III has acquired the ability to reciprocate in role taking and is concerned with interpersonal concordance, while the one at Stage IV not only expresses this belief but formulates it in a framework of upholding the established order. Kohlberg describes both stages as conventional reasoning. At the postconventional level the individual expresses his belief

in the existence of basic human rights and values and the contractual nature by which the member of a society adheres to it (reflecting a Stage V moral reasoning level). Kohlberg's final stage not only reflects the belief in basic human rights but emphasizes that these notions are independent of society, having value in and of themselves.

Considering the act of moral reasoning, or passing a moral judgment, a distinction has to be made as to the complexity of structure, which varies over the six stages discussed above and the content or norms of which Kohlberg conceives twelve: life, poverty, truth, affiliation, love and sex, authority, law contract, civil rights, religion, conscience, punishment. In effect then, dealing with the same problem two individuals reasoning at the same structural level can evoke any two of the twelve content areas to make their point. A case in point would be the issue of stealing a life-saving drug which is beyond the financial means of a person. Given the same structural complexity of reasoning one person may evoke the principle of life vs. property for his argument, while another might choose to argue that the preservation of life is more important than the upholding of a law forbidding stealing.

Levels of Cognitive Processing and Moral Reasoning

Piaget describes the development of general cognitive capacities as consisting of four stages: sensorimotor, preoperational, concrete operations and formal operations

with the latter typically developing between the ages of 12 to 15. A comparison of Piagetian stages of cognitive processing and Kohlberg's development of moral reasoning is provided in Table I.

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Table I about here

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The sequence of stages is seen as largely invariant and universal. Piaget does allow for the observed fact that children of the same age need not be capable of the same mental operation. However, it has been argued by Colby, Kohlberg & Gibbs (1979) as well as McGeorge (1975), to name just a few, that neither prompting nor training can induce the child to significantly advance his moral reasoning beyond the presently attained level of cognitive processing. In essence then, the argument is that the degree of cognitive functioning limits moral reasoning beyond that level.

## Cognitive Processes and the Concept of Mediated Learning Experiences

The development of cognitive structure in the child has been conceptualized by the behavioral school as an increase in S-R bonds, by others, especially Piagetian followers, in similar fashion with the organism intervening in the well known stimulus-organism response formula (Piaget, 1965). Both orientations though confess to the universal modality of Direct Exposure as the most pervasive form of change producing factors. The modality of learning by direct exposure

TABLE I

RELATIONSHIPS BETWEEN LOGICAL AND MORAL STAGES

| Piagetian Logical Stage | Moral Stage |
|---|---|
| Preoperational; Concrete Operations (A) (physicalistic absolutism; categorical classification) | Stage 1 (Punishment-obedience orientation) |
| Concrete Operations (B) (reciprocity, relativity) | Stage 2 (instrumental-relativist orientation) |
| Beginning Formal Operations (inverse of reciprocal) | Stage 3 (interpersonal concordance orientation) |
| Basic Formal Operations (A)* (total system perspective) | Stage 4 (legalistic-authority orientation) |
| Basic Formal Operations (B)* (consolidation of ability to separate variables; generalize; and formulate principles) | Stage 5 (social contract; higher law orientation) |

*These relationships are speculative in the absence of data employing current scoring techniques for moral stages.

From: J. Arbuthnot and D. Faust, Teaching Moral Reasoning: Theory and Practice, Haper & Row Publishers, New York, 1981.

cannot, however, by itself account for the development of human mental functioning and least of all for man's capacity for being modified through the intentioned intervention of mediating others. Mediated Learning (MLE) so termed by Feuerstein et al. (1979) is conceptualized as the proximal determinant of both the development of cognitive functioning in man and the observed phenomenon of differential cognitive development among individuals. In contrast to direct exposure learning where stimuli impinge on the organism in randomized order and are largely fragmentary and accidental in nature, Mediated Learning Experiences provide for the intentioned, and well planned exposure to the environment by framing, filtering and scheduling the appearance or disappearance of certain stimuli. Arbitman-Smith, Haywood and Bransford (in press) express this concept by stating that MLE

> . . . includes, but is not limited to, such functions as stimulus selection . . . focusing on relevant aspects of a stimulus complex, repeating exposure to important stimuli, perceiving and understanding similarities and differences, sequential relationships, dimensionality, antecedents and consequences, commonalities in experience, and such operations as comparing, categorizing, relating past, present, and future, and grasping the concept of generalizability of experience to new situations.

It can be convincingly argued that the more a child has been exposed to MLE, the greater will be his cognitive modifiability to use and derive benefit from the direct exposure to stimuli. The converse can also be abundantly demonstrated, and manifests itself among other things in the lack of or

impaired existence of a great variety of cognitive functions, which Feuerstein conceptualizes as being basic to adequate cognitive processing. The present paper does not permit a further detailed discussion of this issue, and the reader is referred to the writings of Feuerstein et al (1979, 1980). Finally, before concluding this section, it has to be stated that retarded performance is not a permanent condition but one which through carefully instrumented intervention is reversible. Some of the relevant outcome literature has been reviewed by Arbitman-Smith et al. (1983).

Deficient Cognitive Functions and Their Remediation

The individual who has become the victim of a lack of Mediated Learning Experiences, manifested in reduced modifiability, frequently experiences attitudinal and motivational difficulties in addition to being more often a passive recipient of information instead of one who actively determines the order, structure and meaning of the stimuli around him. In addition to these more global and pervasive deficiencies, the mediationally deprived individual manifests a number of specific deficient cognitive functions which sufficiently impair his mental functioning and thus lower the level of cognitive and ipso facto the level of moral reasoning he otherwise would be capable of. Feuerstein et al. hypothesize and present evidence for the existence of these deficient cognitive functions which can be ascertained and temporarily remediated as demonstrated through the use of

the Learning Potential Assessment Device (LPAD). The specific deficient cognitive functions used in this report are briefly summarized below. Remediation of the specific deficient cognitive functions together with the attendant motivational and attitudinal components is provided in a phase-specific re-teaching or Mediated Learning Experience "retrofit" program, which capitalizes on the three major characteristics of MLE, intentionality, transcendence, and meaning.

## Specific Deficient Cognitive Functions and Their Relevance to Moral Reasoning

Feuerstein in his various writings has delineated the existence of some 28 Deficient Cognitive Functions (DCFs), and while not claiming to be all inclusive, they nevertheless cover most and are applicable to the analysis of cognitive processes. Of these Functions, nine (9) have been singled out which were deemed to be especially applicable to the analysis of logico-verbal statements as presented in Kohlberg's moral issue responses. The most relevant parts of the DCFs are discussed, but the reader is advised to consult the major writings of Feuerstein for details as well as other parameters of the cognitive map such as operations (a set of actions used in the elaboration of obtained information), modality (the various modes in which information is expressed), phase (the stage within the information processing sequence), and level of efficiency (degree of efficiency with which a certain act can be performed). Two

parameters which are of particular importance to the present analysis, level of Complexity and level of Abstraction, are briefly discussed. Complexity refers to the quantity and quality of units of information necessary to produce a given mental act. The ability to handle x-number of units depends to a large extent on the novelty or familiarity of the data presently processed. The level of Abstraction describes the distance between any given mental act and the object or event on which it operates. Labelling an object or event is considered low in abstraction while operations on hypothetical relationships are understood as being of a more complex nature.

For the purpose of this presentation the nine cognitive functions have been worded in the positive directions stating that the particular cognitive activity is present. After this rewording the various functions have been rank-ordered according to their perceived levels of comprehensiveness in the mental act. The designation "E" refers to functions conceived of being present during the Elaborational, while "I" indicstes their existence at the Input Phase. The nine Functions are given below in descending order:

$E_a$ Inferential, hypothetical Thinking

Elaboration on one or more problem solving hypotheses by assuming certain principles or facts and pursuing the process to its logical consequences. Realization of the existence of alternative explanations and weighing their differential outcome.

$E_b$ Use of logical Evidence

Formulation of logical conclusions on commonly accepted

premises without necessarily questioning the premises or assumptions.

$E_c$ Experiencing and subsequently defining the Problem

Awareness of the problem or disequilibrium and concomitant attempts at reflecting on the apparent incompatibility, but not including the solving process per se.

$I_d$ Conservation of Constancies across Variations

Awareness of invariances across transformations and specifics. Demonstration of an internally consistent reasoning sequence regardless of specifics. Comparative behavior is the most common prerequisite as it determines the common elements despite perceived variations.

$I_e$ Capacity for considering two sources of information at once

Ability to simultaneously use or combine two or more sources of information demonstrating relational rather than successive or alternate thinking. Ability to 'decentrate' or taking the position of the perceived order.

$E_f$ Use of Summative Behavior

Demonstrated use of summing up reality as part of one's interaction with it; to form an impression as an active cognitive act without expressing the tension between problem components.

$E_g$ Projection of Relationships between Objects and/or Events

Recognition of contingent relationships between events; that events do not occur in isolation; interdependence.

$E_h$ Use of Spontaneous Comparative Behavior

Expression of relationships between and among components of the problem and labelling by superordinate concept.

$E_i$ Use of Relevant as opposed to Irrelevant Cues in Problem Definition

Identifies and names essential components of problem which relate to the tension between the parts.

Evidence of Cognitive Functioning at Various Levels of Moral Reasoning

As has been stated above, the various Cognitive Functions

were rank-ordered according to the perceived level of comprehensiveness manifested in mental processing. While the functions were selected to have applicability to logico-verbal reasoning, no attempts were made to a priori determine their relevance to any of the stages described by Kohlberg. In Table II the presence of the various Cognitive Functions in either the Pro-Stealing or Con-Stealing positions to the following stimulus dilemma has been indicated. Examples of rated dilemma responses are provided in the Appendix.

> In Europe, a woman was near death from a very bad disease, a special kind of cancer. There was one drug the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost him to make. He paid $200 for the radium and then charged $2000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about $1000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, 'No, I discovered the drug and I'm going to make money from it.' So Heinz got desperate and broke into the man's store to steal the drug for his wife. (Arbuthnot & Faust, 1981, p. 50)

The interrator agreement of the five trained judges is consistently very high. Agreement at the 85% level or higher is achieved in the great majority of ratings. A scattering of lower levels of agreement (70-84%) is evident in a few cases.

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Table II about here

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TABLE II

PRESENCE OF COGNITIVE FUNCTIONS IN MORAL REASONING PASSAGES, INTERRATOR AGREEMENT #

| Stages | Cognitive Functions | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Ea | Eb | Ec | Id | Ie | Ef | Eg | Eh | Ei |
| | Hi ——— Comprehensiveness ——— Lo | | | | | | | | |
| Post-Conventional Level | | | | | | | | | |
| VI Pro | | * | * | + | * | * | * | * | * |
| Con | * | * | * | * | * | * | * | * | * |
| V Pro | | | * | * | * | * | * | * | * |
| Con | * | | * | + | * | * | * | * | * |
| Conventional Level | | | | | | | | | |
| IV Pro | | | * | + | * | * | * | + | * |
| Con | | | * | * | * | * | * | + | + |
| III Pro | | | | * | * | + | * | * | * |
| Con | | | | * | + | + | * | * | * |
| Pre-Conventional Level | | | | | | | | | |
| II Pro | | | | | + | * | * | * | * |
| Con | | | | | * | * | * | * | + |
| I Pro | | | | | | | + | * | * |
| Con | | | | | | | + | * | + |

# results of five raters

* = 85% or higher agreement

+ = 70-84% agreement

Considering the overall results of the ratings a general statement is in order: the higher the answer on the Kohlberg scale the more likely is the presence of more complex cognitive functions observed in the dilemma response. This in itself had been anticipated given Piaget's developmental sequence and its relationship to moral reasoning. Of interest here are, however, the interim results of a pilot study into the effects of Instrumental Enrichment teaching to a class of upper-elementary Special Education and Learning Disability students and the comparative performance of regular class students and pupils from a Special Education class not receiving the Feuerstein Instrumental Enrichment program. Representative samples from the three groups are provided in the Appendix.

While it is impossible to generalize from the results obtained--a total of twelve students were asked to respond in each of the three student groups--it appears that the Special Education students who had received no IE teaching responded at the lowest level of moral reasoning, followed by the students from the regular class. The Special Education students receiving IE demonstrated a greater reluctance to make brash statements. They demonstrate awareness of the problem tension which exists between property rights and the more dominant right to life. While their language does not exceed the complexity of the Regular class students, their statements are longer and contain more relevant components and comparisons. In fact, it can be demonstrated

that their development of moral reasoning has reached into the conventional level which is beyond the typical level achieved for students of average intelligence at that age level. If remediational teaching as required by the Feuerstein program can produce significant changes in Special Education students after one year's exposure, one wonders what complexity of cognitive processing can be attained with normally functioning students.

## REFERENCES


Arbitman-Smith, R., Haywood, H.G., & Bransford, J.D. Assessing Cognitive Change, in Learning and Cognition in the Mentally Retarded, C.M. McCauley, R. Sperber, & P. Brooks, (Eds.) Baltimore: University Park Press, (in press).

Arbuthnot, J. and Faust, D. Teaching Moral Reasoning: Theory and Practice, Harper & Row Publishers, New York, 1981.

Colby, A., Kohlberg, L. & Gibbs, J. "The Measurement and Longitudinal Study of Moral Judgment." Final Progress Report to NIH, March, 1979, Cambridge, Mass.: Center for Moral Education, Harvard University.

Feuerstein, R., Rand, Y. & Hoffman, M. The dynamic assessment of retarded performers: The learning potential assessment device, theory, instruments and techniques. Baltimore: University Park Press, 1979.

Feuerstein, R., Rand, Y., Hoffman, M. & Miller, R. Instrumental enrichment. Baltimore: University Park Press, 1980.

Kohlberg, L. "Stage and Sequence: The Cognitive-Developmental Approach to Socialization." In D. Goslin (Ed.), Handbook of Socialization Theory and Research, Chicago: Rand McNally, 1969, 347-480.

McGeorge, C. "Susceptibility to Taking of the Defining Issues Test of Moral Development." Developmental Psychology, 1975, 11, 1, 108.

Piaget, J. The Moral Judgment of the Child, New York: Free Press, 1965.

## STAGE 1: HETERONOMOUS MORALITY

Pro-stealing: "Heinz should steal the drug. It isn't really bad to take it. He'd really only be taking a $200 drug, not a $2000 drug. And his wife might be a really important person."

Con-stealing: "No, he really shouldn't take it. He'd be taking the property of the druggist and probably doing harm to his store. He'd get caught and be punished. And besides, some really important person might need the drug badly."

STAGE 2: INDIVIDUALISM, INSTRUMENTAL PURPOSE, AND EXCHANGE

Pro-stealing: "Heinz probably doesn't really want to steal the drug, but it's all right in this case because he badly needs it to save his wife's life. And he needs her and wants her to live. Besides, the druggist would deserve to have it stolen for trying to rip off his customers."

Con-stealing: "No, he shouldn't steal it. He might not care that much for his wife, anyway. And he could always find a new one. What good would it do to save her life if he then had to go to jail? And the druggist is just trying to make some money; after all, that's what people are in business for."

## STAGE 3: MUTUAL INTERPERSONAL EXPECTATIONS, RELATIONSHIPS, AND INTERPERSONAL CONFORMITY

Pro-stealing: "Yes, he should steal the drug. He was only doing what a good and loyal husband would do. He should care enough about her to want to do it; he would feel guilty if he didn't. And while it isn't nice to take someone else's property, the druggist was being heartless and cruel."

Con-stealing: "No, he shouldn't steal it. He couldn't be blamed if she died. It was the druggist who was the mean and selfish one. He should obey the law, because if people just made selfish decisions all the time, there would be chaos."

## STAGE 4: SOCIAL SYSTEM AND CONSCIENCE

Pro-stealing: "Well, it's wrong to steal someone's property; there are laws that protect property. But in this case he wouldn't really be wrong because a human life is at stake. Heinz was following a higher moral law. Life has an intrinsic value that overrides things like property. And, it's his wife's life. He has taken a vow to protect her, and he has a responsibility as her husband to save her. He should, of course, expect to pay the druggist back, and maybe go to jail for a while."

Con-stealing: "No. Even though the druggist morally had no right to charge that much, legally he does. Heinz doesn't have a legal right to take someone else's legitimate property. We have to respect the rights we guarantee by law to others. If not, society would break down."

## STAGE 5: SOCIAL CONTRACT, OR UTILITY AND INDIVIDUAL RIGHTS

Pro-stealing: "The law certainly forbids stealing another's legitimately held property. But at the same time, the law was not designed with circumstances such as these in mind. Thus, Heinz would be justified in taking the drug, with full expectation of making real and social recompense. The law here is not doing a good job in protecting fundamental human rights. The value of life certainly exceeds and takes precedence over the value of private property, and hence Heinz should feel no guilt in his act."

Con-stealing: "While I doubt that the community would blame Heinz for resorting to theft in this case, it isn't really right. Heinz's situation is certainly compelling. However, he has agreed to live by the standards of the community. As such, he must weight whether such individual acts would ultimately result in the greatest good for all. By breaking into another's legally held property and stealing, Heinz would be violating principles of trust which are part of the contract he has made with his community."

## STAGE 6: UNIVERSAL ETHICAL PRINCIPLES

Pro-stealing: "Heinz is being forced to decide whether to to obey a rule against stealing, which he probably endorses, and preserving a human life. Since he must choose, there is no alternative, really. He is morally bound to steal the drug. When a person's claims to fundamental rights (such as life) are not protected by the law, an individual has a right (and perhaps a duty) to violate the law in order to secure those rights (assuming legal means have been exhausted). The druggist has, in effect, given up personal property rights: the druggist's position is not in keeping with general notions of justice."

Con-stealing: "This is certainly a highly compelling situation, and morally one could condone stealing the drug to save one's wife's life - or anybody else's life. However, there may be others who need this drug and have an equally valid claim to it. Heinz, by acting on his own in this situation, is in essence denying their morally justifiable rights. If only one dose of the drug is available, a more equitable way should be found to determine who gets it. The decision should not be made by only one of the relevant participants in such a decision."

Brent, age 8, IQ 104, Regular Class, Pre-conventional level

"Yes, I think Heinz should steal the drug. And if he did not his wife would die and he would have nobody to look after his kids, if he had any, and he would have to get married again."

Cindy, age 9, IQ 101, Regular Class, Pre-conventional level

"I don't know, I guess Haines should steal the drug. He has to get the drug or his wife would die. He could also steal some money to pay for the drug."

Willard, age 9, IQ 82, Special Education Class after ONE year exposure to Instrumental Enrichment

"I have to read this part again. It is not easy to decide. The drug belongs to the druggist, but the man's wife is dying. I think I would steal the drug because a wife is worth more than a drug."

Rudi, age 9, IQ 86, Learning Disability Class after ONE year of exposure to Instrumental Enrichment

"Gee, this is a hard problem. The druggist has to make money to feed his own family. If Heinz cannot get the money from his friends he may steal it. It is more important to save a life; he can always give the money back. The druggist is mean to want so much money. Heinz has told him that his wife is dying. You can always earn more money, but you can't get a wife back when she is dead."

Larry, age 8, IQ 80, Special Education Class, NO intervention

"I don't know, Heinz must steal the drug to save his wife. Maybe he could get a cheaper drug or talk to his doctor."

Ullwyn, age 9, IQ 83, Special Education Class, NO intervention

"I would not steal the drug 'cause the police might find out and put me in jail. He should tell his wife, maybe she could get some money for the drug or talk to the druggist."